

Thinking About Parts of Numbers

Another important focus involves further extending part-part-whole ideas, especially thinking about a missing part, which is the agenda of the next several activities.

Often in computations it is useful to recognize that a number can be made up of a "nice" number and some more. The nice part (maybe a multiple of 50 or 100) is dealt with first and then the smaller leftover piece can be considered.

ACTIVITY 2.17

50 and Some More

Say a number between 50 and 100. Students respond with "50 and ____." For 63, the response is "50 and 13." Use other numbers that end in 50 such as "450 and some more."

Nice numbers also are often broken apart in computations. The next two activities are extremely useful for developing the thinking required for counting-up approaches to subtraction. Introduce these activities to the full class using the overhead projector. Have students share their thinking strategies.

ACTIVITY 2.18

The Other Part of 100

Two students work together with a set of little ten-frame cards. One student makes a two-digit number. Then both students work mentally to determine what goes with the ten-frame amount to make 100. They write their solutions on paper and then check by making the other part with the cards to see if the total is 100. Students take turns making the original number. Figure 2.11 shows three different thought processes that students might use.

Being able to give the other part of 100 is so useful in invented strategies that students should get quite good at it.

If your students are adept at parts of 100, you can change the whole from 100 to another number. At first try other multiples of 10 such as 70 or 80. Then extend the whole to any number less than 100.

Suppose that the whole is 83. Sketch four little ten-frame cards showing 36. Looking at your "cards," what goes with 36 to make 83? How did you think about it?



What you just did in finding the other part of 83 was subtract 36 from 83. You did not borrow or regroup. Most likely you did it in your head. With more practice you (and students as early as the third grade) can do this without the aid of the cards. These ideas are discussed further in Chapter 4.

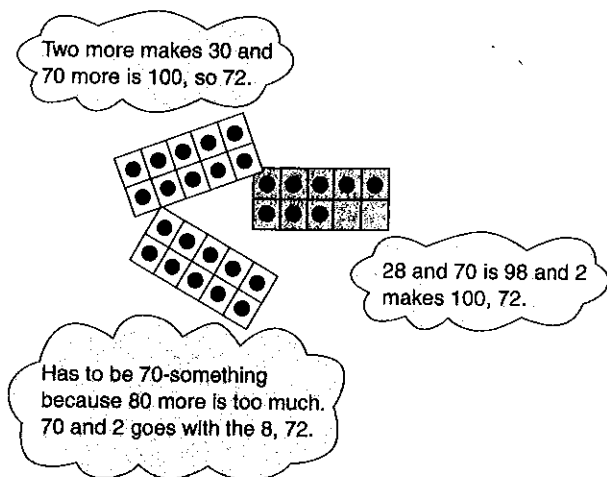


FIGURE 2.11 *****

Using little ten-frames to help think about the "other part of 100."